

Multifunctional Fibers for Energy Generation/Storage and Thermal Controls in Extravehicular Mobility Unity, Phase I

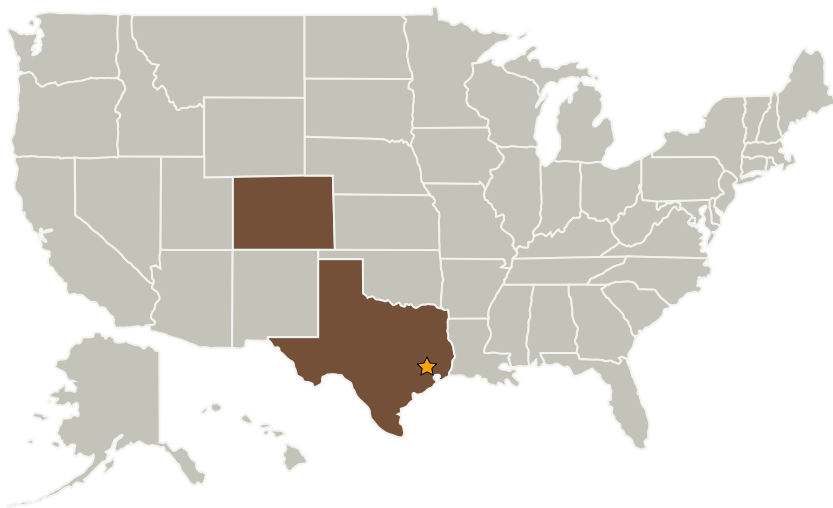
Completed Technology Project (2006 - 2006)



Project Introduction

ITN Energy Systems, Inc., in collaboration with Hamilton Sundstrand, proposes to design and develop multifunctional fibers for use in energy generation, energy storage, and thermal control controls for extravehicular mobility units (EMU). Next generation spacesuit concepts, such as the Chameleon Suit, offer the ability to dramatically extend extravehicular activity (EVA) mission time and space beyond anything currently available today. Revolutionary advances in technologies, including energy generation and storage as well as climate controls, are required to eliminate the reliance on expendables that currently limit missions with today's EVA.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ Johnson Space Center(JSC)	Lead Organization	NASA Center	Houston, Texas
ITN Energy Systems, Inc.	Supporting Organization	Industry Minority-Owned Business	Littleton, Colorado



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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Johnson Space Center (JSC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Primary U.S. Work Locations

Colorado

Texas

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX11 Software, Modeling, Simulation, and Information Processing
 - └ TX11.1 Software Development, Engineering, and Integrity
 - └ TX11.1.3 Test and Evaluation